

### **Abstract**

**Introduction.** Attention dysfunction was a major characteristic of people with attention deficit hyperactivity disorder (ADHD), especially sustained attention. There were controversies regarding the association between both age and intelligence with attentional ability.

**Method.** The digit cancellation task and Wechsler Intelligence Scale for Children – 4<sup>th</sup> Edition (Hong Kong) were used to assess attention ability and intelligence respectively. There were 75 subjects with ADHD diagnosis (mean age = 9.98) and 74 control subjects (mean age = 9.79) completed the assessments.

**Result.** There is a negative association between age and attentional dysfunction among both clinical and control group. There is a negative association between intelligence and attentional dysfunction among clinical group. No association was found between intelligence and attentional dysfunction among control group.

**Discussion.** The age-related improvement on attentional ability may due to the development of attention with age, or maturation of attention skills and strategies, or both. The intelligence-related enhancement on attention may due to the shared genes that manifest both attentional ability and intelligence, or the process of cortical development that affected both

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constructs. Ceiling effect may explain why no association was found between intelligence and attention in control group.